

Brefeldin A PRODUCT DATA SHEET

issue date 01/06/2020

Product Name: Brefeldin A

Product Number: B012

CAS Number: 20350-15-6

Molecular Formula: $C_{16}H_{24}O_4$

Molecular Weight: 280.36

Form: Powder

Appearance: White or almost white powder

Solubility: Acetone: Soluble

DMSO: Soluble Ethanol: Soluble

Methanol: 10 mg/mL, Clear and colorless or light yellow solution

Water: Insoluble

Source: Penicillium brefeldianum

Storage Conditions: 2-8°C

Description: Brefeldin A is a mammalian and plant cell antibiotic involved in protein

transport inhibition and tumor apoptosis.

This product is considered a dangerous good. Quantities above 1 g may be subject to additional shipping fees. Please contact us for specific questions.

Mechanism of Action: Brefeldin A inhibits protein transport by preventing accumulation of COPI

proteins on the Golgi apparatus which facilitate vesicle fusion from the endoplasmic reticulum (ER). By preventing Golgi-COPI protein function, vesicles from the ER cannot properly fuse with the Golgi to be secreted to

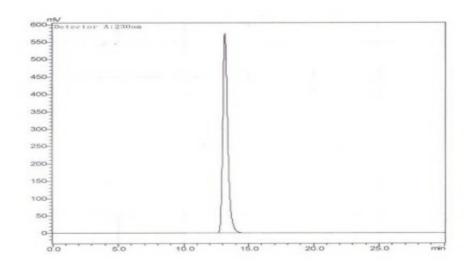
destined locations.

Cancer Applications Brefeldin A has demonstrated anti-cancer properties by inducing apoptosis in

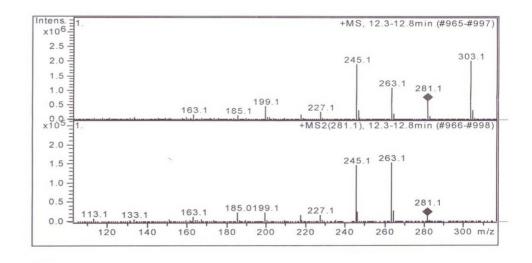
leukemia and colon carcinoma cells.

Technical Data:

HPLC Chromatogram Showing Ultra High, Single Fraction Purity of Brefeldin A, EvoPure®



Mass Spectrometry Results of Brefeldin A



References:

Nebenführ, Andreas, et al. "Brefeldin A: Deciphering an Enigmatic Inhibitor of Secretion." American Society of Plant Biologists 130.3 (2002): 1102-108. Plantphysiol.org. Nov. 2002. Web. 29 Oct. 2012.

Shao, R. G. "Brefeldin A Is a Potent Inducer of Apoptosis in Human Cancer Cells Independently of P53." Experimental Cell Research 15.227 (1996): 190-96. Ncbi.gov. Web. 18 Sept. 2012.

If you need any help, contact us: info@toku-e.com. Find more information on: www.toku-e.com/